

# HEALTHCARE

**Intelligent Nurse Station/  
Telecare & Telemedicine/  
Emergency Medical Service/  
AI and Robots**

**SOLUTIONS TO DRIVE  
SUPPLY CHAIN INNOVATION**

**Q1 - 2024**

# About Winmate

Founded in 1996, Winmate Inc. is a pioneer in rugged computing technology. Winmate has provided business leaders worldwide with reliable, robust solutions for the most challenging industrial conditions for over two decades. From R&D to manufacturing to in-house testing, Winmate Inc. manages the entire product development process with ready-made products available for quick deployment. Today Winmate's innovative approach has helped countless enterprises at every level with equipment automation and seamless Industrial Internet of Things (IIoT) integration.

From the industrial display, panel PC, HMI, embedded systems to rugged mobile devices, Winmate caters to industries ranging from transportation and logistics to marine and military, railway, oil, and gas, and provides customization services to create a unique solution for specific customer requirements.

## The Winmate Difference

### Innovation and Ruggedness

With innovation and ruggedness, our products are designed to meet the requirements of vertical markets' environmental standards.

### Engineering Intelligence

We are committed to maintaining the highest standards in engineering excellence to ensure our products deliver reliability, durability, and optimized performance.

### Quality Commitment

Quality assurance and entire engineering processes are conducted in-house. It is why we invested significantly in our state-of-the-art testing facility with additional global support.

“  
**INNOVATIVE  
TECHNOLOGY FOR  
OPERATIONAL  
EXCELLENCE.**  
”

### Efficiency

Our team is committed to efficiency and maintaining the shortest possible development cycles. The whole development process is conducted in-house to achieve the market advantage in speed and quality from design to testing.

### Reliability

Reliability, service, and support are part of our foundation. Every product scrutinizes industrial standards testing to verify electrical, mechanical, thermal, and firmware design performance.

# Customized Solutions

Years of experience allow Winmate to offer customized solutions for different applications.

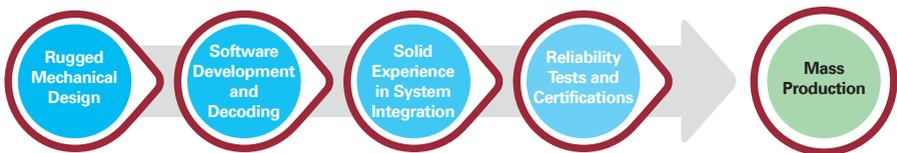
From product design to accessories, our engineering team designs and support the system integration process.

- CUSTOMIZED CONFIGURATION
- CUSTOM OS IMAGE
- CUSTOM BIOS
- ENCLOSURE DESIGN
- PERIPHERALS AND OPTIONS
- CUSTOM-DESIGNED ACCESSORIES

# Technical Know-How

We understand that access to cutting-edge solutions purposely built for their applications is imperative for enterprises operating in rugged or potentially hazardous environments. As a result, Winmate locates its resources from project research and design, software development and customization, product verification and validation, and in-house testing to research and implement the latest technologies available.

## The latest technologies we deploy for our rugged products:



- Dry and wet optical bonding
- Panel enhancement for sunlight readability
- Anti-reflection (AR) and anti-glare (AG) glass protection coating
- Light sensor
- Hyper dimming
- Electronic potting
- Touch screen integration: projected capacitive, resistive, or SAW touch
- Waterproof enclosure
- Military EMI and mesh coating
- Wireless capabilities
- Data capture devices integration
- Defroster for ultra-low temperature environments
- Stainless steel SUS 316/ AISI 316
- Shock and vibration resistance
- Wide-range operation temperature

# Healthcare Solutions

## Overview

Technology has long played an imperative role in streamlining hospital operations and improving patient care. In hospital environments, performance, reliable and accurate image reproduction are imperative. From medical images to patient data, the hospital environment is a complex ecosystem that requires advanced technology to keep it running smoothly.

### Our medical imaging solutions include :

- Surgical and clinical display
- Durable design and know-how in medical images visualization

Expand your medical and healthcare business with the Winmate. As a technology solutions leader, Winmate values our partners. As a partner, you are a vital instrument in ensuring the customer needs are understood and that their expectations are exceeded every time.

## Technology

### Certification & Quality Approvals

Winmate developed and implemented a quality management system based on a process management approach that has demonstrated its ability to provide consistent products that meet customer and applicable regulatory requirements.

The quality system complies with the international standard ISO 9001:2008 and the standards which apply to related industries.

Winmate achieved ISO 13485:2016 and EN ISO 13485:2016 certification for its' design, development, production, installation, and servicing of medical devices. This achievement also enables Winmate to expand its medical-related product line, and create new opportunities for our original design manufacturer (ODM), original equipment manufacturer (OEM), and rebranding partners.

ISO 9001

ISO 14001

IECQ QC080000

ISO 13485



What does this mean for you? Winmate's certification confirms any portable panel PCs and mobile tablets we develop for use in the Healthcare industry are safe and meet all regulatory design requirements.



# YOUR HEALTHCARE APPLICATION. OUR RUGGED COMPUTING SOLUTION.

## Industrial Challenges

- **Real Time Information**

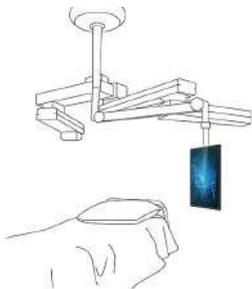
The trend in Healthcare applications is to get patients' information in real time for a quick response. Cost saving, online data available everywhere and reduced loading of personnel are the key benefits of this solution. Physicians, clinicians, nurses and ambulance workers who take care patients can focus on helping them, instead working with papers and reports.

- **Reliable and Accurate Image Reproduction**

In hospital environments, performance, reliable, and accurate image reproduction are imperative. From Healthcare images to patient data, the hospital environment is complex ecosystem that requires advance technology to keep it running smoothly.

- **Complex Environment**

The need is to reduce cable cluttering and maintenance downtime.



Patient Monitoring Display



Surgical Display



Patient Identification and Report

# Application Story

## Patient Care



## Background

Portable and mobile devices dive into hospital environments. The ability to gather and access information with the touch of a fingertip, and carry it around wherever you go is invaluable for those working in this sector. Portable and mobile computers allow paramedics and nurses to instantly access and keep patient records. They use the tablets to schedule patient checkups in both outpatient and inpatient wards, issue and authorize prescriptions, record and transmit patient data in multimedia format and use instant live video conferencing and chat features to enhance collaboration. With technological advancements healthcare professionals can to provide better patient care.

## Core products

- 10.1" Healthcare Tablet Computer M101P-ME

## Main Challenges

- Expansion adapter module design for USB connection
- Must be able to work with vehicle docking
- Customized housing with anti-bacterial material

## Why Winmate

- Integrated barcode scanner for data collection
- Medically certified vehicle docking
- Medically certified IEC/EN 60601-1, IEC 60601-1-2

“ **MOBILE HEALTHCARE TECHNOLOGIES FOR BETTER PATIENT CARE.** ”



Application Diagram: Patient Care

# Application Story

## Digital Operation Room



## Background

Healthcare rugged tablet assists communication between the operating table and other divisions in the medical center and clinical units. The tablet, combined with a specialized software program, supports the e-Healthcare to monitor the surgery and facility management.

Winmate healthcare-grade tablet with a 10.1" screen to guarantee optimum visibility. Various Wireless connectivity options and compact form-factor for mobility. It is easy to use and facilitates faster data transfer from and to the surgery room for information management, consultation, or educational purposes.

## Core products

- 10.1" Healthcare Tablet Computer M101P-ME

“Futureproof Your Healthcare IoT.”

## Main Challenges

- Examination Camera HD
- IP65 water/ dust rating
- Tough scratch-resistant chemically strengthen glass touch-screen
- Sunlight readable, high-contrast 10.1" LCD
- Dual long-life hot-swappable rechargeable batteries

## Why Winmate

- Ruggedized, state-of-the-art tablet
- Medically certified vehicle docking



Application Diagram: Digital Health

# 10.1" Windows Healthcare Rugged Tablet M101P-ME

## Custom Configuration



Memory



Storage



WWAN



Smart Card  
Reader



Barcode  
Reader



HF RFID  
Reader



Expansion  
USB RS232



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**DROP-RESISTANT.  
MOBILE. RUGGED.**

”

## Application



### Patient Care

#### IMPROVES EFFICIENCY AND SAVES TIME FOR REGULAR CHECKUPS

With a 10.1-inch tablet computer M101P-ME, nurses can easily access patient information any time from any place. If needed, the M101P-ME can also retrofit medication schemes and doctor prescriptions.

- 10.1", 1920 x 1200 IPS LED Panel
- Intel® Pentium® N4200 1.1 GHz, up to 2.5 GHz
- Windows 10 IoT Enterprise

CE, FCC, UL, PTCRB, Verizon, IEC/EN 60601-1, IEC/EN 60601-1-2, UL 60601-1

Housing enhanced with antimicrobial properties

Long battery life

USB 3.0 (Type C) connector

Optional 1D/2D barcode scanner to scan medications or wristbands (Optional)

Lightweight, rugged, IP65 waterproof and dustproof

MIL-STD-810G shock, vibration and drop resistance

# 10.1" Android Healthcare Rugged Tablet M101Q8-ME



“ **DROP-RESISTANT.  
MOBILE. RUGGED.** ”

- 10.1", 1920 x 1200 TFT LCD Display
- Qualcomm® Snapdragon™ 660, Octa-core up to 2.2 GHz
- Android 9.0

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CE, FCC, IC IEC 60601-1, IEC 60601-1-2, EN 60601-1  
ANSI/AAMI ES 60601-1

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Housing enhanced with antimicrobial properties

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3 GB RAM + 32 GB eMMC

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Optional 1D/2D barcode scanner

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8 MP front camera, 13 MP rear camera with autofocus

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Lightweight, rugged, IP65 waterproof and dustproof

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MIL-STD-810G shock, vibration and drop resistance

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## Custom Configuration



Barcode Reader    Hotswap Battery

## Application



### **Intelligent nurse station**

**PROVIDE MEDICAL  
ORGANIZATIONS WITH  
EASIER ACCESS TO  
IN-HOUSE SCHEDULING  
AND PLANNING**

Along with a competent registered nurse terminal, health professionals may react and also check to a variety of various information input aspects.

## Custom Configuration

Up to  
**32 GB**

Memory



Bluetooth

Up to  
**4 TB**

Storage



WWAN

# 21.8" Healthcare Panel PC W22IT7T-PTA3-ME



## “ A HEALTHIER FUTURE WITH DATA-DRIVEN CARE ”

- 21.8", Intel® Core™ i5-1135G7 Healthcare HMI Panel PC
- Windows 10 IoT (Optional), Linux Ubuntu 22.04 (Optional)
- P-CAP Touch
- Fanless Cooling System
- Front IP65

## Patient Monitoring

### PIONEERING HEALTHCARE EXCELLENCE

The Panel PCs provide healthcare professionals with immediate access to vital patient data, including heart rate and blood pressure. Their user-friendly touchscreens enable quick and accurate data interpretation, empowering healthcare teams for top-tier patient monitoring.

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True-flat design for easy cleanability

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Housing enhanced with antimicrobial properties

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Support VESA mount

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# 23.8" Healthcare Panel PC W24IT7T-PTA2-ME



## “ANTIMICROBIAL EXCELLENCE FOR A HEALTHIER TOMORROW”

- 23.8", Intel® Core™ i5-1135G7 Healthcare HMI Panel PC
- Windows 10 IoT (Optional), Linux Ubuntu 22.04 (Optional)
- P-CAP Touch
- Fanless Cooling System
- Front IP65

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True-flat design for easy cleanability

---

Housing enhanced with antimicrobial properties

---

Support VESA mount

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### Custom Configuration

Up to  
**32 GB**

Memory



Bluetooth

Up to  
**4 TB**

Storage



WWAN

### Application



### Operating Room Control

#### STREAMLINING HEALTHCARE WITH PRECISION

Winmate Panel PCs serve as the control nerve center, enabling surgeons and medical teams to orchestrate intricate procedures, access patient data, and monitor vital signs seamlessly. Their fanless, silent operation ensures a sterile environment while delivering critical information.

# 15.6" Multi-Touch Color Surgical Display W15L100-PTA3-ME



“ **FOR MEDICAL IMAGING  
AND CLINICAL DATA  
VISUALISATION.** ”

- 15.6", 1920 x 1080 resolution
- Projected capacitive multi-touch
- Housing with antimicrobial properties
- Front IP65 Multi-Touch Color Surgical Display

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Certified IEC 60601-1:2005, IEC 60601-1-6:2010,  
EN 60601-1-2:2015  
ANSI/AAMI ES 60601-1:2005/A1:2012  
EN 62368-1: 2014

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VGA input and HDMI input

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Stylish and elegant design

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Support VESA mount

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## Application



## **Diagnosis and Clinical Review**

### **SHARP & BRIGHT IMAGES**

Winmate 15.6" healthcare display allows monitoring patient information and supports various mounting options for added convenience of diagnosis and clinical review.

# 32" Multi-Touch Color Surgical Display W32L100-PTA1



“ **PIXEL-PERFECT IMAGES FOR CLINICIANS.** ”

- 32"; 3840 x 2160 resolution
- Projected capacitive multi-touch
- Bottom side keys x 5
- Front IP65

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Certified IEC 60601-1:2005, IEC 60601-1-6:2010,  
EN 60601-1-2:2015  
ANSI/AAMI ES 60601-1:2005/A1:2012  
EN 62368-1: 2014

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Support VGA, DVI, HDMI, DP variety signal input

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Fanless and ventless design, easy-to-clean,  
multi-touch color surgical display

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Support IR remote controller

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Housing with antimicrobial properties

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Support VESA mount

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## Application



## **Diagnosis and Clinical Review**

**OPTIMIZED DISPLAY SOLUTIONS TO IMPROVE VISUALIZATION FOR AID IN CRITICAL DIAGNOSIS**

The W32L100 series display support VAG and HDMI offers a user-friendly interface designed to improve workflow for healthcare environments.

# 32" Multi-Touch Color Surgical Display W32L100-PTA3-ME



FCCE

“ **NEXT LEVEL OF  
HEALTHCARE IMAGING.** ”

- 32", 1920 x 1080 resolution
- VESA mount
- Front IP65
- Bottom side keys x 5

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Compliance IEC 60601-1:2005, IEC 60601-1-6:2010,  
EN 60601-1-2:2015  
ANSI/AAMI ES 60601-1:2005/A1:2012  
EN 62368-1: 2014

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Support VGA, HDMI signal input

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Fanless and ventless design, easy-to-clean medical  
grade monitors

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Support VESA mount

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## Application



## **Surgical Display**

### **32" SURGICAL DISPLAY SUPPORT VESA MOUNT AND EASY TO CLEAN**

The 32" surgical display ensure the precise imagery remains unchanged from the video source to the display and allows healthcare providers to have the most accurate imaging.

# 32" Multi-Touch Color Surgical Display W32L100-PTA1-SDI



## “ PROJECTED CAPACITIVE TOUCH WITH 4K UHD RESOLUTION. ”

- 32", 4K UHD 3840 x 2160 resolution
- Projected capacitive touch
- VESA mount
- Bottom side keys x 5
- Front IP65

Compliance IEC 60601-1:2005, IEC 60601-1-6:2010,  
EN 60601-1-2:2015  
ANSI/AAMI ES 60601-1:2005/A1:2012  
EN 62368-1: 2014

Support 12G-SDI, HDMI (Optional),  
DP variety signal input

Fanless and ventless design, easy-to-clean medical  
grade monitors

Support VESA mount

### Application



### **TECHNOLOGIES TO IMPROVE PATIENT CARE**

**4K UHD HEALTHCARE  
DISPLAY FOR HIGH  
ACCURACY REAL TIME  
IMAGING DURING  
SURGERY**

4K UHD monitors, implement  
the latest in technology, are  
making the decision easy.

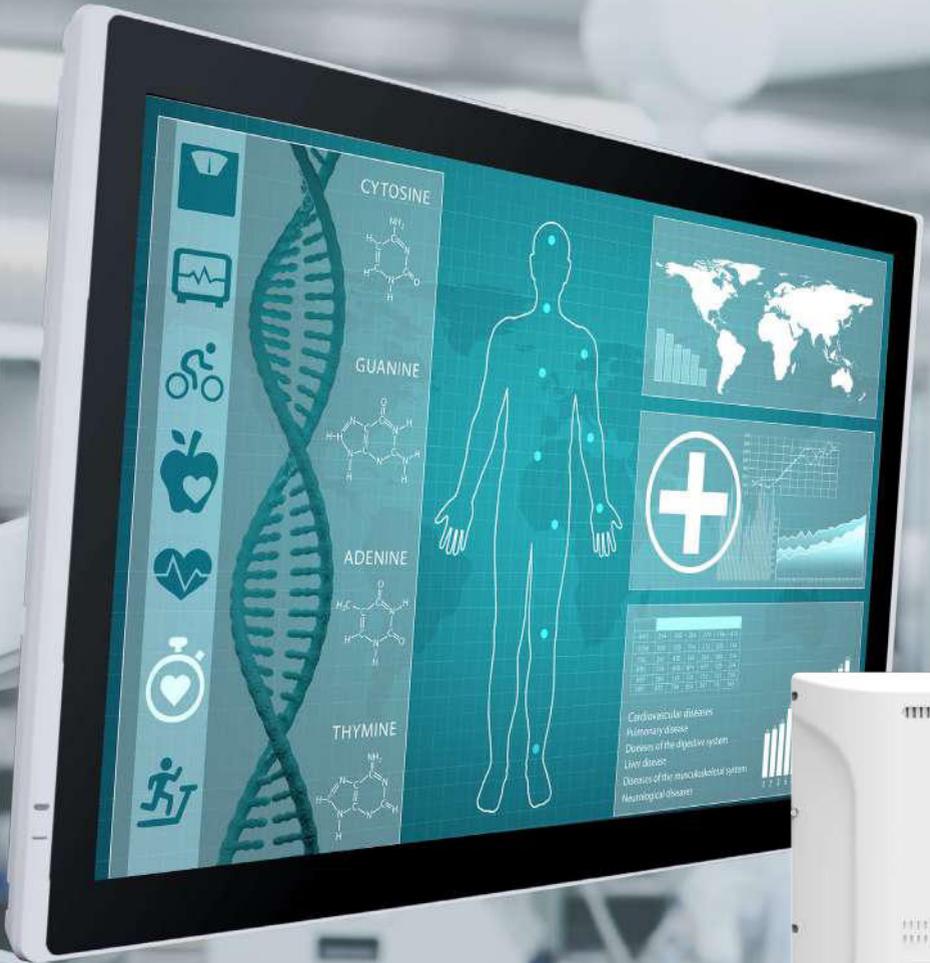
# M101Q8-ME

RUGGED  
HEALTHCARE  
TABLET COMPUTER  
FOR BETTER  
PATIENT CARE



**WINMATE**





CYTOSINE



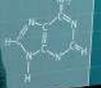
GUANINE



ADENINE



THYMINE



Year	Value
2010	100
2011	110
2012	120
2013	130

Cardiovascular diseases  
Kidney disease  
Diseases of the digestive system  
Liver disease  
Diseases of the musculoskeletal system  
Neurological disorders

**WINMATE**



**MULTI-TOUCH COLOR SURGICAL DISPLAY**